AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method for processing an unexpected data interruption in data transmission scheduling between a radio link control (RLC) layer and a medium access control (MAC) layer in a wireless communications device, the unexpected data interruption occurring after RLC entity information is provided by the RLC layer to the MAC layer and leaving the RLC layer with less ready-to-send SDU data than indicated in the RLC entity information, the method comprising:

the RLC layer submitting to the MAC layer an appropriate number of substitute protocol data units (PDUs) that are not control PDUs in place of discarded or interrupted service data unit (SDU) data in response to a data request by the MAC layer.

Claim 2 (Original): The method of claim 1 in which the unexpected data interruption is due to a discard timer, a reset operation, a suspend operation, a stop operation, or a re-establish operation.

Claim 3 (Original): The method of claim 1 in which the substitute PDUs are padding PDUs.

Claim 4 (Currently Amended): A method for data scheduling between a radio link control (RLC) layer and a medium access control (MAC) layer in a wireless communications device, the method comprising:

the RLC layer providing RLC entity information to the MAC layer, the RLC entity information indicating that the RLC layer has service data unit (SDU) data to be transmitted;

after providing the RLC entity information, the RLC layer receiving an unexpected data interruption that requires the RLC layer to discard or interrupt transmitting of the SDU data and leaves the RLC layer with less ready-to-send SDU data than indicated in the RLC entity information;

after the unexpected data interruption, the MAC layer requesting at least a protocol data unit (PDU) from the RLC layer in response to the RLC entity information; and

the RLC layer submitting to the MAC layer at least a substitute PDU that is not a control PDU in response to the MAC request;

wherein the at least a substitute PDU is submitted in place of the discarded or interrupted SDU data.

Claim 5 (Original): The method of claim 4 in which the number of substitute PDUs provided by the RLC layer to the MAC layer equals the number of PDUs requested by the MAC layer from the RLC layer.

Claim 6 (Original): The method of claim 4 in which the unexpected data interruption is due to a discard timer, a reset operation, a suspend operation, a stop operation, or a re-establish operation.

Claim 7 (Original): The method of claim 4 in which the at least a substitute PDU is a padding PDU.

Claim 8 (Currently Amended): A wireless communications device comprising a processor that executes a program for processing an unexpected data interruption in data transmission scheduling between a radio link control (RLC) layer and a medium access control (MAC) layer, the unexpected data interruption occurring after RLC entity information is provided by the RLC layer to the MAC layer and leaving the RLC layer with less ready-to-send SDU data than indicated in the RLC entity information, the program causing:

the RLC layer to submit to the MAC layer an appropriate number of substitute protocol data units (PDUs) that are not control PDUs in place of discarded

or interrupted service data unit (SDU) data in response to a data request from the MAC layer.

Claim 9 (Original): The wireless communications device of claim 8 in which the unexpected data interruption is due to a discard timer, a reset operation, a suspend operation, a stop operation, or a re-establish operation.

Claim 10 (Original): The wireless communications device of claim 8 in which the substitute PDUs are padding PDUs.

Claim 11 (Currently Amended): A wireless communications device comprising a processor that executes a program for performing data scheduling between a radio link control (RLC) layer and a medium access control (MAC) layer, the program causing:

the RLC layer to provide RLC entity information to the MAC layer, the RLC entity information indicating that the RLC layer has service data unit (SDU) data to be transmitted;

the RLC layer to receive a data interruption after providing the RLC entity information, the data interruption requiring the RLC layer to discard or interrupt transmitting of the SDU data and leaving the RLC layer with less ready-to-send SDU data than indicated in the RLC entity information;

the MAC layer to request at least a protocol data unit (PDU) from the RLC layer in response to the RLC entity information; and

the RLC layer to submit to the MAC layer at least a substitute PDU that is not a control PDU in response to the MAC request;

wherein the at least a substitute PDU is submitted in place of the discarded or interrupted SDU data.

Claim 12 (Original): The wireless communications device of claim 11 in which the number of substitute PDUs submitted by the RLC layer to the MAC layer equals the number of PDUs requested by the MAC layer from the RLC layer.

Claim 13 (Original): The wireless communications device of claim 11 in which the data interruption is due to a discard timer, a reset operation, a suspend operation, a stop operation, or a re-establish operation.

Claim 14 (Original): The wireless communications device of claim 11 in which the at least a substitute PDU is a padding PDU.

Claim 15 (Currently Amended): A method for processing an unexpected data interruption that is not due to a discard timer in data transmission scheduling between a radio link control (RLC) layer and a medium access control (MAC) layer in a wireless communications device, the unexpected data interruption occurring after RLC entity information is provided by the RLC layer to the MAC layer and leaving the RLC layer with less ready-to-send SDU data than indicated in the RLC entity information, the method comprising:

postponing discarding or interruption of service data unit (SDU) data in response to the unexpected data interruption until the RLC layer submits a requested number of protocol data units (PDUs) to the MAC layer in response to a MAC request initiated by the RLC entity information.

Claim 16 (Original): The method of claim 15 in which the unexpected data interruption is due to a reset operation, a suspend operation, a stop operation, or a re-establish operation.

Claim 17 (Currently Amended): A method for data scheduling between a radio link control (RLC) layer and a medium access control (MAC) layer in a wireless communications device, the method comprising:

the RLC layer providing RLC entity information to the MAC layer, the RLC entity information indicating that the RLC layer has service data unit (SDU) data to be transmitted;

after providing the RLC entity information, the RLC layer receiving an unexpected data interruption that is not due to a discard timer, wherein the unexpected data interruption will leave the RLC layer with less

ready-to-send SDU data than indicated in the RLC entity information;

after the unexpected data interruption, the MAC layer requesting at least a protocol data unit (PDU) from the RLC layer in response to the RLC entity information;

the RLC layer providing the MAC layer at least one PDU that is triggered to be discarded or interrupted by the unexpected data interruption in response to the MAC request; and

after submitting the at least one PDU to the MAC layer, and in response to the unexpected data interruption, the RLC layer discarding or interrupting SDU data not submitted to the MAC layer.

Claim 18 (Original): The method of claim 17 in which all remaining SDU data is discarded by the RLC layer in response to the unexpected data interruption after the at least one PDU is submitted to the MAC layer.

Claim 19 (Original): The method of claim 17 in which the unexpected data interruption is due to a reset operation, a suspend operation, a stop operation, or a re-establish operation.

Claim 20 (Original): The method of claim 17 in which the number of the at least one PDU submitted by the RLC layer to the MAC layer equals the number of PDUs requested by the MAC layer from the RLC layer.